

IV. THE ROUTE 7/ROUTE 58 INTERSECTION

A. INTRODUCTION

Routes 7 and 58 intersect a mile north of Christiana, a few hundred yards from the I-95/Route 7 interchange. Delaware Technical College is northeast of the intersection, and commercial development surrounds it on the other sides. The intersection is currently at ground level, but because traffic is very heavy and the volume is projected to increase even further in coming years, DelDOT proposes to elevate Route 7 onto an overpass. The improvements will involve the construction of several ramps, the relocation of an access road northeast of the intersection, and the relocation of softball and soccer fields belonging to Delaware Technical College. The current survey covered all of these improvements. Much of the project area, however, had already been disturbed by the extensive construction activity of recent decades. Therefore, although the project included a walkover survey of the entire project area, subsurface testing was focused on less disturbed areas, especially on the Technical College grounds.

B. PROJECT SETTING AND ENVIRONMENT

The project area is located at the boundary of the Coastal Plain physiographic province, which is

generally characterized by low-lying, nearly level topography, and the Piedmont, which is characterized by dissected upland terrain. Much of the project area is rather low-lying and wet, and the immediate surroundings include several large wetlands. Immediately east of the project area is Churchman's Marsh, a large wetland at the confluence of the Christina River and White Clay Creek. Other large wetlands are located both north of the project area along White Clay Creek, and to the south along the Christina River. The dominant soils in the project area are Mattapex silt loam, a fertile soil with some drainage

problems, and Keyport silt loam, a moderately drained soil that develops on old clay deposits (Mathews and Lavoie 1970).

During the past 15 years the immediate vicinity of the project area has experienced extremely rapid development, changing in that time from an essentially rural area to a bustling suburb. Some of the many recent developments in the vicinity are an enclosed shopping mall to the south, a hospital and large office park to the west, a major banking center to the north, and the Delaware Technical College to the east. The intersection itself is surrounded on the northwest, southwest, and southeast by motels, restaurants, and shopping centers. The only open ground is to the northeast, around the Technical College. DelDOT is constructing replacement softball and soccer fields east of the Technical College in an area of woods and waste. Parts of this area have also been disturbed, but the proposed location of the new soccer field includes undisturbed woods overlooking wooded wetlands.

C. BACKGROUND

1. Previous Investigations

A number of significant archaeological survey and excavation studies have been carried out in the vicinity of the project area (Figure 12). The Clyde Farm Site, 7NC-E-6, one of the most important prehistoric sites in Delaware, is located about 1,000 yards northeast of the Route 7/Route 58 intersection. In recent years the University of Delaware has conducted several excavations on the Clyde Farm Site as well as surveys of the surrounding areas, locating a number of other prehistoric sites nearby. These sites span the Woodland I (3000 BC to AD 1000) and Woodland II (AD 1000 to 1600) periods, and they have yielded large numbers of projectile points and other stone tools, ceramics, steatite bowl fragments, and subsurface features (Custer 1989).

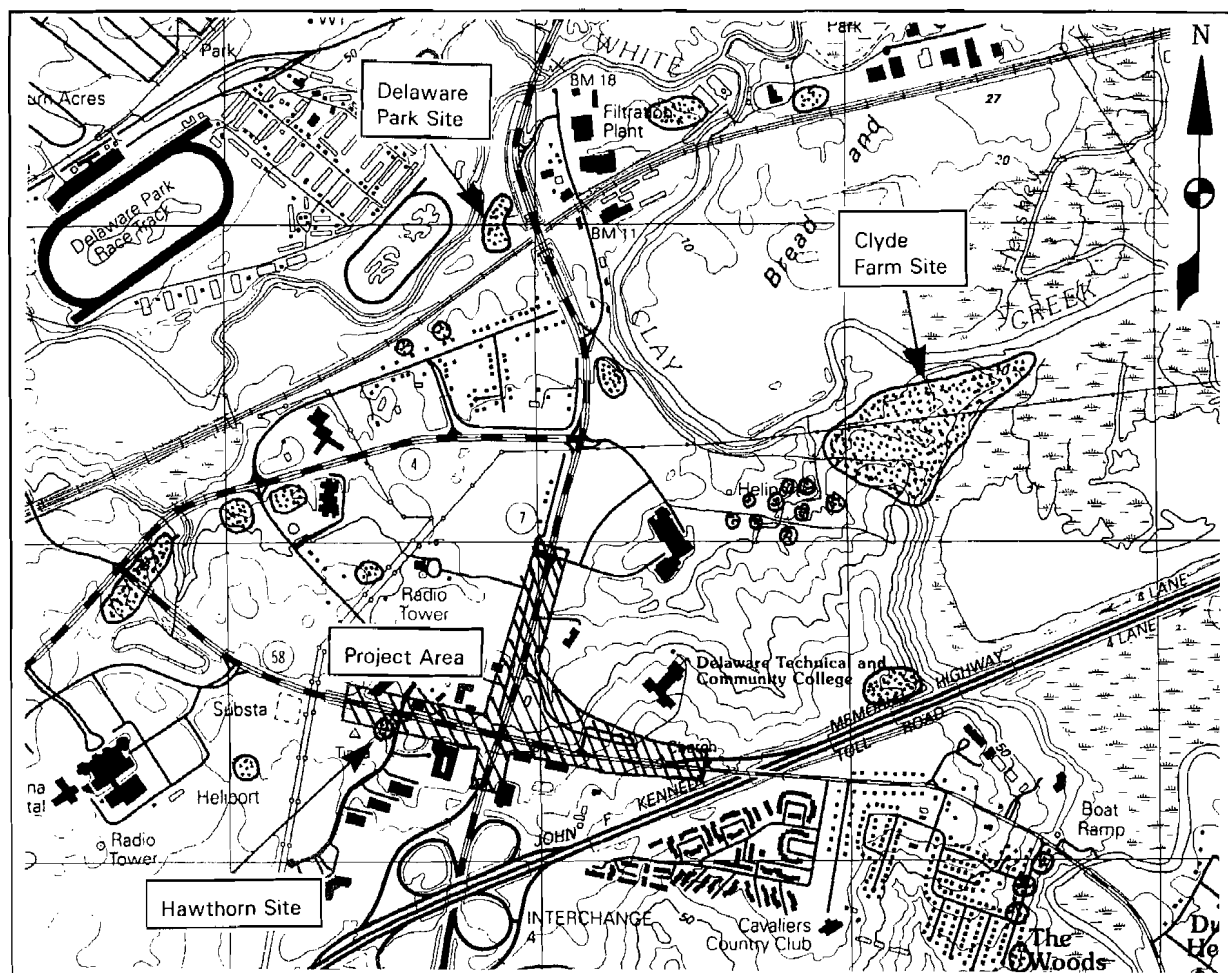


FIGURE 12: Route 7/Route 58 Intersection, Showing Some Nearby Archaeological Sites

SOURCE: USGS Newark East, DE, Quadrangle 1993

Other archaeological surveys have been carried out in the area as part of DelDOT highway improvement projects. The first was conducted by MAAR Associates on proposed improvements to Routes 4, 7, and 273 (Thomas 1980). During that survey a number of small prehistoric sites were found along Route 4 northwest of the project area. The most significant discovery was the Delaware Park Site (7NC-E-41), a major prehistoric site dating to the Woodland I period, which was located along White Clay Creek approximately one mile from the Route 7/Route 58 intersection. Excavation of that site showed that it contained dozens of large storage pits and thousands of artifacts (Thomas 1981).

Another survey was carried out along New Churchman's Road (Route 58) when the road was

widened in 1982 (O'Connor et al. 1983). One site was located during that survey, a multicomponent site called the Hawthorn Site (7NC-E-46), which included prehistoric remains and a historic farmstead. Both components were later extensively excavated (Coleman et al. 1984; Custer and Bachman 1984). The prehistoric component was a camping or procurement site adjacent to a small stream. Large numbers of cobbles were found in the soil, as well as large numbers of unfinished stone tools and waste from making stone tools. The site seems to have been a place where cobbles were collected for use by prehistoric tool-makers.

The large number of important archaeological sites within a mile of the Route 7/Route 58 intersection shows how vital this environment was

to prehistoric peoples. The large wetlands that formed where Piedmont streams emptied onto the Coastal Plain were extremely rich in many kinds of plant and animal foods. The model of prehistoric development in Delaware proposed by Custer (1984, 1989, 1994) assigns the exploitation of these wetland resources a crucial part in the history of the region. In what Custer (1989) calls the Woodland I period, between 3000 BC and AD 1000, the population of Delaware grew greatly. This population growth was accompanied by increasingly complex social organization, including the appearance of chiefdoms, the development of long-range trade, and the first elaborate burials known in the region. According to Custer, what made these developments possible was the exploitation of the wetlands. Agriculture was not practiced in Delaware in Woodland I times, so all food still had to be hunted or gathered. In Delaware's wetlands, wild foods were abundant enough to allow hunter-gatherer peoples to settle down for a good part of the year at sites referred to as "base camps." In these camps, people dug large pits to store seasonally abundant foods. Large numbers of these storage pits have been found at the Delaware Park and Clyde Farm sites. Little evidence has been found to show what foods were being stored, but the roots of marsh plants such as pickerel weed, arrow arum, golden club, and cattails are good candidates (McKnight 1999). According to Custer, the security provided by these food stores, along with the decreasing need for people to move regularly to find more food, made the development of more complex societies possible. Any archaeological evidence relating to these developments would therefore be of considerable importance.

2. Historical Sketch

The project area is in White Clay Creek Hundred, which was one of the first inland areas of Delaware to attract substantial European settlement. The town of Christiana Bridge (now known as Christiana), located two miles south of the project area, developed as a crossroads and landing on the Christina River by the 1740s. With

the coming of the railroad in 1839, however, crossroads towns such as Christiana Bridge suffered, and the town entered a long decline from which it recovered only as a suburb in recent years.

Although the area was early to develop, none of the available historical maps show houses or farms in the project area. Route 7, the Christiana to Stanton Road, is shown on early maps, but Churchman's Road (Route 58) was not constructed until the 1880s. The historic houses shown on nineteenth-century maps have been accurately located during earlier work on New Churchman's Road, and none are shown in the project area. Therefore, although historic settlement was considered possible in the project area, no historic sites were expected.

D. THE ARCHAEOLOGICAL SURVEY

1. Methods

The majority of the project area had been disturbed by recent construction, and fieldwork was focused on less disturbed areas. Disturbance was evaluated by a review of plans (scale 1"=100') of the proposed intersection improvements and a thorough surface inspection of the entire project area. The only undisturbed areas identified were northeast of the intersection. Area B was the site of the proposed soccer field, in a wooded area east of the Technical College. Area C was the site of the proposed access road, which runs from the Technical College north across the property of the Automobile Association

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of America (AAA) and to the Morgan Guaranty Trust driveway. The survey of both of these areas was carried out by shovel testing. (There was no Area A.)

2. Findings

a. Area B

Area B was the location of the proposed new soccer and softball fields, east of the Technical College in woodland ground just north of Route 58. Nineteen shovel test pits were excavated in the location of the proposed soccer field (Figure 13). The eastern two-thirds of this area was largely undisturbed, and since it consisted of gently sloping ground overlooking wetlands, close to an intermittent stream, it was considered to have high potential for prehistoric archaeological resources. However, no prehistoric artifacts were found. A very thin scatter of historic artifacts, consisting of four pieces of window glass, one piece of whiteware, one nail, and one piece of bottle glass, was found in shovel tests scattered

throughout the area. No more than two artifacts were recovered from any one shovel test, and the scatter was considered too thin to indicate a nineteenth-century house within the area. The artifacts most likely represent a field scatter associated with one of the known nineteenth-century farm sites located south and north of the project area.

The western third of the proposed soccer field, along with the entire proposed softball field, had been disturbed by grading activity and the excavation of a small borrow pit, and these areas were not tested.

b. Area C

Area C was the location of the proposed new access road, northeast of the intersection on the

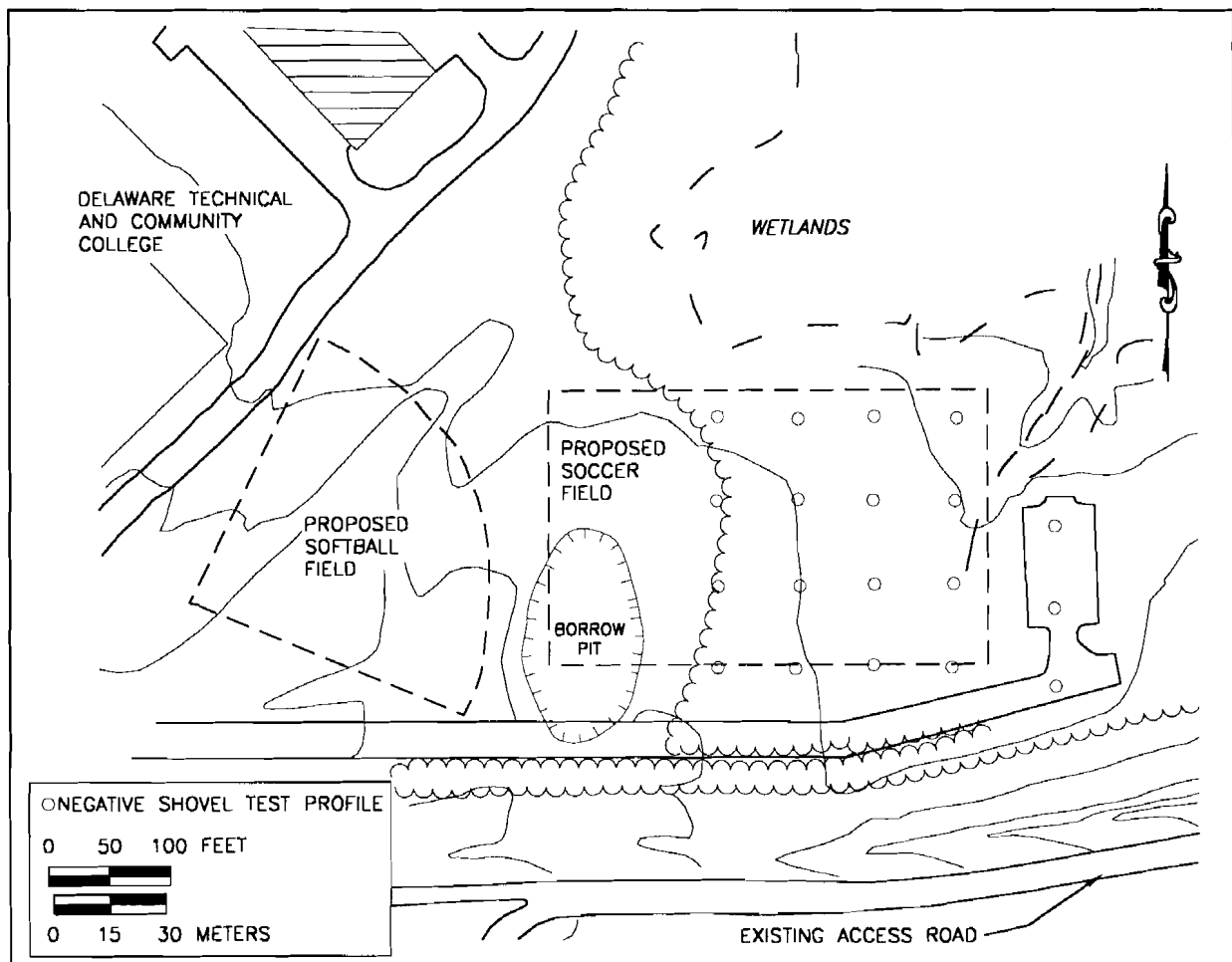


FIGURE 13: Plan of Shovel Testing in Area B, Routes 7 and 58

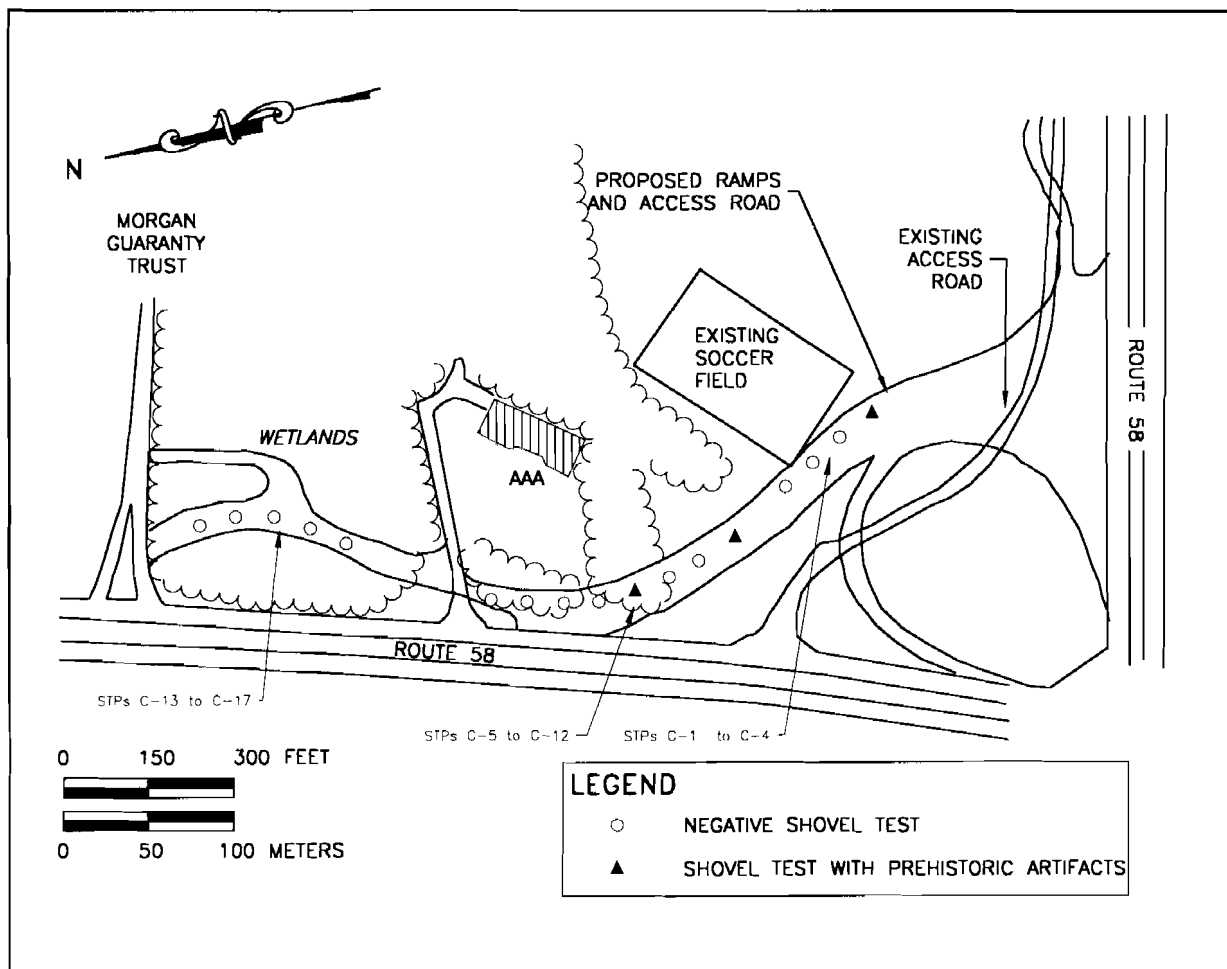


FIGURE 14: Shovel Testing in Area C, Routes 7 and 58

Technical College property. Seventeen shovel test pits were excavated in this area, in a single line at 65-foot (20-meter) intervals, following the route of the access road (Figure 14). Shovel Tests C-1 to C-12 were excavated from the current soccer field north to the AAA driveway. The level of disturbance in this area could not be determined by visual inspection; because of its proximity to an intermittent stream, it was considered to have some potential for prehistoric archaeological resources. The southern part of this line, Shovel Tests C-1 to C-4, encountered soils that had been heavily truncated by grading, and decaying shale bedrock was reached in each shovel test at a depth of 10 to 20 centimeters. Farther north the soil was less disturbed, although all of it had been plowed. Shovel Tests C-10, C-

11, and C-12 encountered substantial quantities of recent bottle glass, which was apparently the result of roadside dumping. Three possible stone flakes were discovered in Shovel Tests C-1, C-5, and C-8.

Shovel Tests C-13 to C-17 were excavated in the wooded wetland between the AAA driveway and the Morgan Guaranty Trust driveway. Although the soils in this area were dry at the time of the testing, it had been a dry summer, and the soil profiles suggested that the area was wet for most of the year. No areas of higher ground that might have been attractive camping areas for prehistoric peoples were noted in this portion of the project corridor. No artifacts were recovered in this area except some recent bottle glass.

E. CONCLUSIONS AND RECOMMENDATIONS

A total of 37 shovel test pits were excavated in the Route 7/Route 58 intersection improvements project area, and no archaeological sites were located. Two possible prehistoric artifacts, both stone flakes, were recovered on Technical College property just northeast of the intersection, but no site was defined and no further work is recommended. Otherwise, only a few pieces of recent glass and other trash were recovered.

The absence of historic sites in the project area had been expected, but to find only two prehistoric artifacts was something of a surprise. The project area, after all, included high ground near wetlands, which is the kind of location most favored by prehistoric Native Americans for campsites. The lesson to be learned from the

absence of archaeological sites in these areas is that somewhat favorable sites may be ignored when there are other excellent locations nearby. The Clyde Farm Site is only 1,000 yards away from Areas B and C, and the Hawthorne Site only 600 yards. Other highly advantageous locations are spread out along the Christina River a mile or two southeast of the project area and White Clay Creek two to three miles to the north. The small streams and wooded swamps near the project area were less useful to Native Americans than the large marshes just a short distance away. Nor, apparently, were there any outcrops of cobbles suitable for making stone tools. It was the fate of the project area, in both prehistoric and historic times, to be an acceptable place for camping or living within easy walking distance of much better places. No doubt thousands of people passed by this spot, but, as far as we know, they all lived somewhere else.